A large, light blue network diagram consisting of numerous nodes connected by lines, forming a complex web structure that spans the width of the page above the title.

Decentralized Blockchain-scheduled Container Orchestration System

WHITE PAPER v1.0.4

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DISTRIBUTEDWEB.IO IN BRIEF

DistributedWeb.io's project (also called DistributedWeb or dWeb) creates a Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS). The DistributedWeb's intellectual property rights are protected by a USPTO patent application 17/701,505.

DistributedWeb.io is a platform that creates a global ecosystem for delivering services like a decentralized code repository, decentralized application execution, decentralized DNS, decentralized database, decentralized load balancing, and decentralized storage.

The DistributedWeb.io's Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS) is a game-changing technology that makes it possible for free and open-source software (FOSS) developers to receive the deserved monetary compensation for their creativity. DBsCOS uses NFT-signed code and enables the execution of software apps to be tracked and accounted for. The FOSS developers get paid based on the execution and usage of their code. DistributedWeb.io provides them with a General Public License that protects their intellectual property rights.

The DBsCOS combines blockchain and cloud technologies in a unified Web3 generation ecosystem that eliminates cloud lock-in and decentralizes the Cloud IaaS industry.

The DBsCOS features native interoperability with all major clouds - AWS, Azure and Google Cloud, etc. The building blocks of the DBsCOS are called Container Orchestration Environments (COE). The COEs can be used for delivering various public cloud services. They are cloud-agnostic solutions. COE can be hosted on any cloud infrastructure and used as an intermediate layer. They can be migrated easily and seamlessly between cloud infrastructures in minutes.

The DBsCOS is implemented through highly innovative solutions developed by the DistributedWeb.io team: Blockchain-controlled scheduling & resource allocation; Decentralized container and code tracking and delivery; Non-fungible token (NFT) signed code; NFT-signed code repository; NFT-signed Container images, and code deployment; Tokenized code execution tracking.

The DistributedWeb.io platform leverages Container technology standards - Docker, Podman, Cri-o, and Containerd-compatible container images.

DistributedWeb.io allows developers, application providers, and users to design, deploy and run Kubernetes-compatible software solutions. It is a game-changing technology because:

It makes it possible for the FOSS developers to receive the deserved monetary compensation for their creativity, based on the execution and usage of their software applications

Enables Infrastructure providers to utilize their computing capacity

Allows Users of computing services to avoid Cloud Lock-in imposed by the major clouds.

SOLUTION OVERVIEW

What is DistributedWeb?

DistributedWeb.io is a Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS). DistributedWeb.io technology is protected by USPTO patent pending application 17/701,505.

The Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS) features 10 high impact cloud innovations:

1. Decentralized Container scheduling.
2. Container Orchestration Environments (COE) managed by a decentralized container scheduler.
3. Decentralized container and code tracking and delivery.
4. Use of non-fungible token - (NFT) signed software code.
5. NFT-signed code repository.
6. NFT-signed container images.
7. Code deployment with tokenized tracking.

8. Internal Decentralized Autonomous Organization (DAO) revenue distribution via NFT-signed code signatures and NFT-signed code tracking.
9. Kubernetes-compatible IoT single-board computer clusters.
10. Container Orchestration Environments (COEs) built out of green, energy-efficient, solar-powered IoT clusters.

The Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS) is implemented through a distributed hybrid mesh network and blockchain-controlled scheduling and resource allocation. The “Decentralized container and code tracking and delivery” is implemented through a non-fungible token (NFT) signed code, NFT-signed code repository, NFT-signed container images, and code deployment with tokenized tracking.

Containers used by the DBsCOS are standard Docker, Podman, Cri-o, Containerd compatible container images.

PROBLEMS & SOLUTIONS

Problem 1

In the current state of the IT industry, the majority of corporations including Big Tech use free and open source solutions (FOSS) software as a backbone of their operations, making trillions of dollars from software solutions created by open-source code creators and developers. The FOSS creators and developers, however, do not receive the deserved earnings for their creativity and ingenuity.

Open-source developers power the whole technology industry. The business of Alphabet (Google), Apple, Oracle, Salesforce, Meta (Facebook), eBay, Yahoo, and many other corporations is built on top of an open source code. Everyone uses Linux, Apache, PHP, Python, Ruby, JavaScript, MySQL, PostgreSQL databases, and other open-source software. Revenue in the Software market is projected to reach \$626.50 billion at the end of 2022 and to rise to \$824.78 billion in 2026. Technology corporations generate huge profits by leveraging open-source software. They do not return a fair share of their profits back to the FOSS developers. The technology industry takes advantage of them. Many

open-source projects have large user bases but do not have the financial and organizational capacity to address various issues in a timely manner. When there is an issue of any kind, users expect FOSS developers to respond and resolve it immediately. However, very few acknowledge the necessity of compensating the developers for their efforts.

The Solution

The solution is DistributedWeb.io. It provides a unique opportunity for open-source developers to get the deserved recognition and to get rewarded for their creativity.

DistributedWeb.io creates a Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS). DBsCOS offers an NFT-signed code repository and NFT-signed container registry. The FOSS solution developers host their software code in the NFT-signed code repositories. They can build containers out of their code and host them in NFT-signed container registries - all signed with their own non-fungible token (NFT). The code execution is tracked and accounted for. The open-source developers get paid based on the usage of their apps.

DistributedWeb.io also provides a FOSS license that protects the intellectual property rights of software creators by using unique non-fungible tokens (NFT).

Problem 2

The model of using IT services – IaaS, PaaS, SaaS, FaaS, etc. - as it has been introduced in the previous decade presents a major technological challenge for businesses – Cloud Lock-in.

Despite being built on open source, cloud service providers, including AWS, Azure, and Google create and use proprietary technology layers that make communication with external IT frameworks quite complex. The Users of the major public clouds cannot easily migrate large arrays of data/files/databases between providers. This results in Cloud Lock-in - operational incompatibility, increased cost, and a growing dependency for millions of businesses worldwide.

The Solution

The solution is DistributedWeb.io. It solves the problem described above by allowing owners of computing power and resources to participate in a large-scale plug-and-play technology ecosystem. The DistributedWeb.io platform creates an open, safe, and fast ecosystem that features native decentralization and distribution of computing tasks. It creates a plug-and-play environment for application owners and computing resource providers.

DistributedWeb.io Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS) is a cloud infrastructure agnostic decentralized platform. It is powered by a network of Infrastructure Providers (called Container Orchestration Environments, abbreviated COE). The network features enterprise-level performance and security. Altogether Container Orchestration Environments create the world's largest enterprise-class distributed web network of independent, coequal business entities. COE can be deployed on top of any bare-metal or virtualized infrastructure, any public cloud, or private clouds - AWS, Azure, Google Cloud, etc.

The DistributedWeb.io's Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS) forms a globally distributed enterprise-grade application hosting and storage platform, built on container orchestration, distributed file system, smart contract, and blockchain architecture.

Problem 3

There is centralization, hierarchical, and often imbalanced distribution of revenue inside those business entities and organizations that create FOSS software. Software developers contribute code to certain communities without being rewarded for their contribution or by getting a one-off reward.

The Solution

The solution is DistributedWeb.io. It enables open-source projects and communities to use DistributedWeb.io's blockchain to create decentralized autonomous organizations (DAOs).

Such DAOs makes it possible for developers who contribute code to FOSS projects to earn royalties on a recurring basis, based on their contribution and code execution.

DistributedWeb.io's platform allows horizontally structured, policy-based business organizations to automatically redistribute their own revenue to their members (individual open-source contributors); DistributedWeb.io allows open-source developers to organize horizontally (in decentralized autonomous organizations - DAO) and redistribute value internally in accordance with their own principles.

PROJECT DESCRIPTION & FUNCTIONALITY

The DistributedWeb.io Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS) creates a technology environment and collaborative platform that brings together open-source developers, infrastructure owners, and users of computing services.

Nowadays, running computer applications in containers and orchestrating containers in clusters of computing nodes are popular methods for hosting web-based applications.

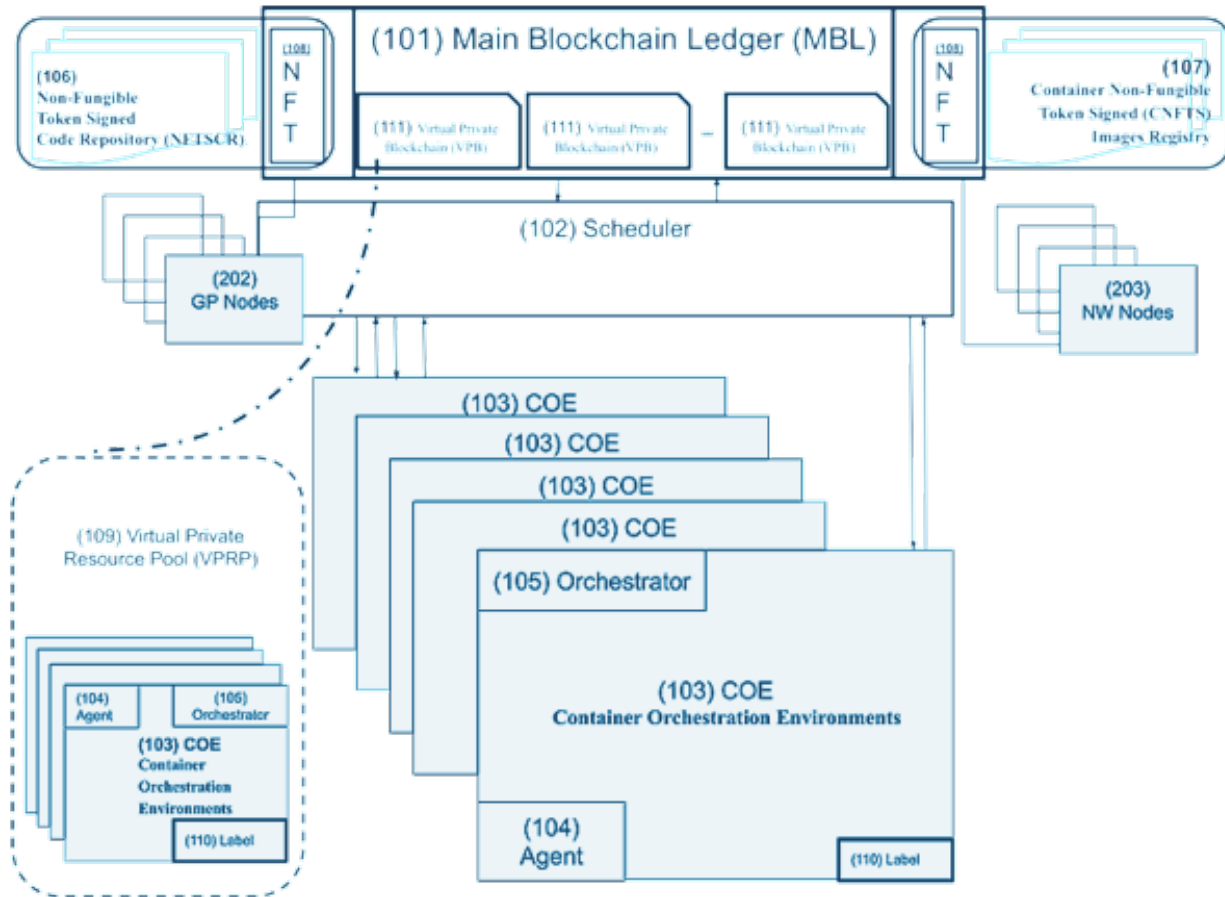
Various public and private cloud providers use this method for providing so-called serverless functions as a service (FaaS). Container registries are widely used as methods for storing immutable images of containerized software, that is used to deploy fast and with minimal effort containerized applications across multiple locations and environments.

Container images, stored in the container registries, comprise immutable layers containing scripts and program code. The usual method for collaborative development and consecutive storing and versioning of code are code repositories (e.g Git), which are built to track code changes and versioning.

Blockchain-Scheduled Distributed Container Orchestration

The DistributedWeb.io is a decentralized blockchain-scheduled container orchestration computing environment with code tracking and delivering capability, through a distributed hybrid network, and blockchain. The general overview of the DBsCOS is displayed in the diagram below.

Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS)



The Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS) changes the way of running computer applications in containers and orchestrating containers.

NFT-signed Code Repository, Execution & Tracking

The DBsCOS enables open-source code to be signed and its execution to be tracked with a non-fungible token (NFT). The DBsCOS uses a Non-Fungible Token Signed Code Repository (NFTSCR). This is a code repository, in which the computer code is signed by a unique NFT. The NFT serves for the tracking of code execution. The tracking function records code execution and the consumed resources (CPU, Memory, Storage, Network Bandwidth, Data Transfer) in every Container Orchestration Environment (COE).

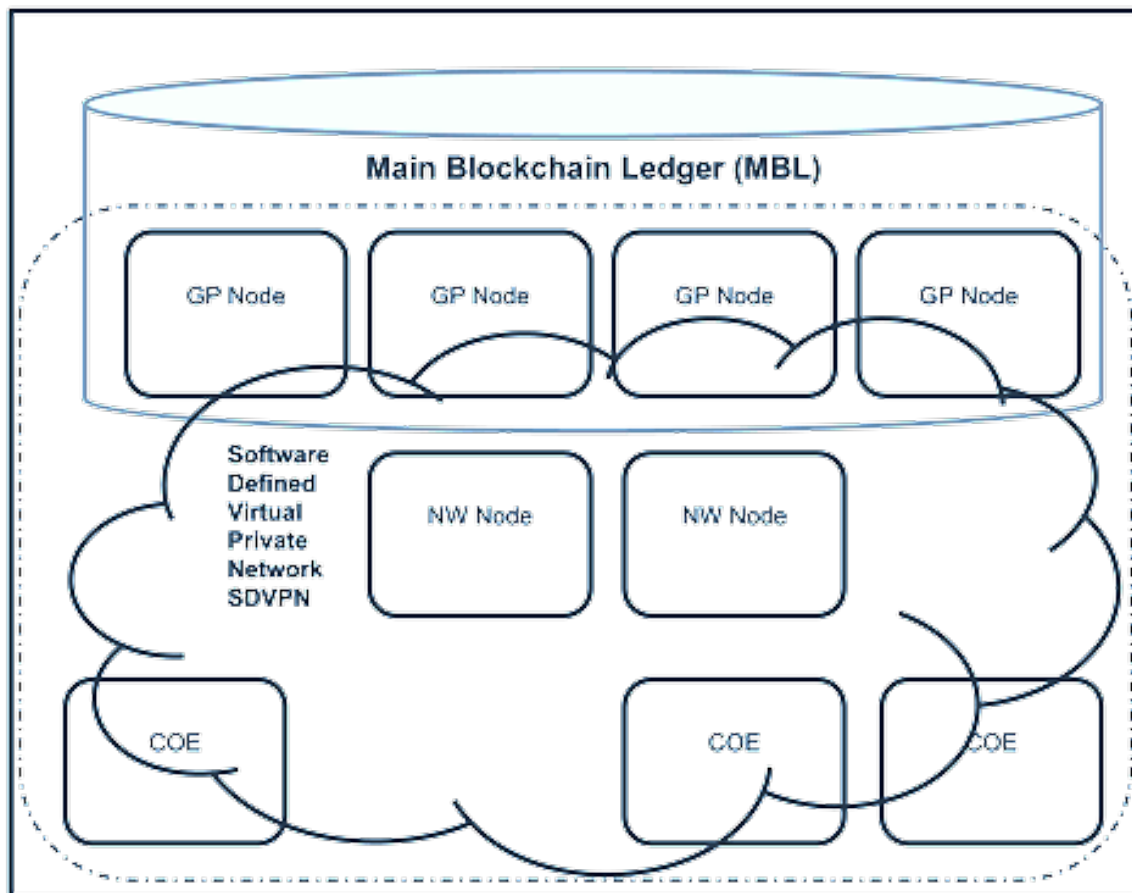
The NFTSCR owners receive rewards in digital tokens according to the recorded execution. Furthermore, pieces of code, for example, container image composer files,

stored in the different NFTSCRs, altogether compose a container that has NFT as a unique identifier – Container Non-Fungible Token Signed (CNFTS). Every code contributor and NFT owner can create their own decentralized autonomous organization DAO on top of the decentralized blockchain and redistribute reward coins according to the DAO's articles of organization.

Decentralized Container Scheduling, Tracking & Delivery

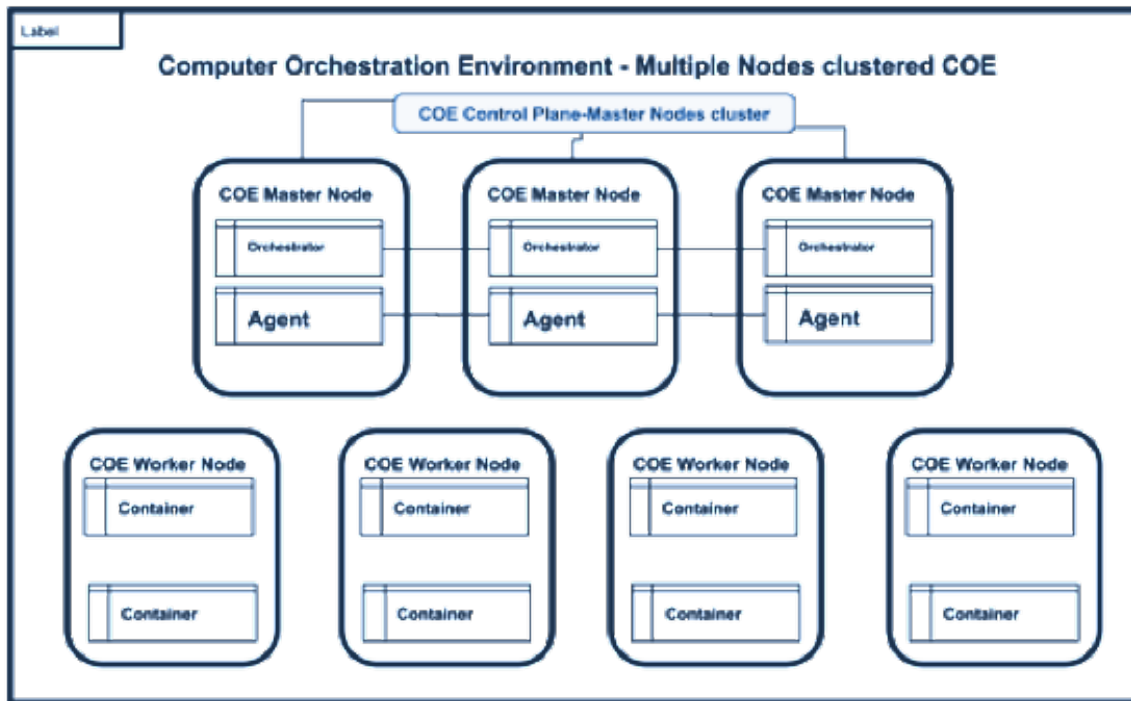
By design, DistributedWeb.io's DBsCOS provides high availability and business continuity to Users and application owners. DBsCOS uses blockchain-coordinated scheduling of containers across multiple decentralized Container Orchestration Environments (COE), hosted by dWeb Hosts. The DBsCOS tracks the available unassigned computing resources (CPU, Memory, Storage, Network Bandwidth, Data Transfer) in each COE. The system also calculates the deployed containers and the computing resources used by each container and calculates the number of digital tokens needed to be paid to dWeb Host (COE) owners in their associated token wallets. The User that orders execution of a container with predefined parameters (CPU, Memory, Storage, Network Bandwidth, Data Transfer) is charged for the services by deduction of digital tokens from their wallet, and the blockchain assigns those tokens to the COE owner's wallet, in accordance with the provided resources.

The Container Orchestration Environments (COE) - [displayed on the diagram below](#) - run by COE Owners, use immutable OS images. The immutable images are hosted in container registries used by the DBsCOS. The immutable images are named COE/OS. The COE/OS are signed with a non-fungible token (NFT) for the purpose of securing the COEs' immutability, thus ensuring the security of the entire ecosystem.



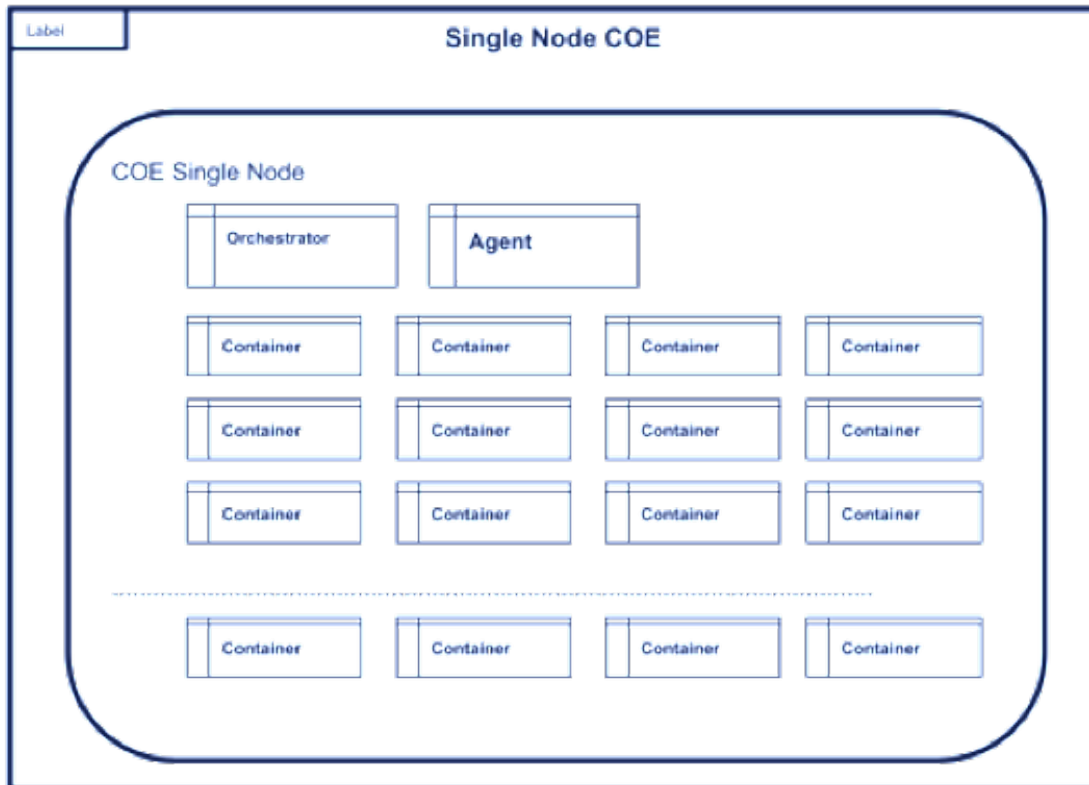
Multi-node Container Orchestration Environments (COE)

The drawing - [displayed on the digram below](#) - represents the design of a Multi-node Container Orchestration Environment (COE), which is a node in the DBsCOS. COE Master Nodes and COE Worker Nodes are COE/OS (immutable images).



Single-node Container Orchestration Environments (COE)

The drawing - [displayed on the diagram below](#) - shows the design of a Single-node Container Orchestration Environment (COE), which is a node in the Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS).



The DBsCOS features a decentralized, blockchain-coordinated built-in logging and alerting system that tracks the resources provided for each container scheduled to COE, and reports back to the blockchain. This functionality is provided by the Agent.

The applications and data hosted on the DistributedWeb.io ecosystem are protected by a strong Service Level Agreement (SLA). DBsCOS is powered by an enterprise-grade computing network and does not rely on end users. The ecosystem leverages solid business entities (COE Owners) with a long and proven record. They are among the leaders in the IT infrastructure hosting industry. Ten percent of all COEs' are owned by

DWeb DAO. They guarantee the operational continuity of DistributedWeb.io's Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS).

Virtual Private Resource Pool (VPRP)

DistributedWeb.io blockchain has the functionality to host virtual private blockchains (VPB) and to deliver blockchain-as-a-service, also “Distributed Ledger-as-a-Service” (DLaaS). Virtual Private Resource Pool (VPRP) is a private infrastructure group of Container Orchestration Environments that reside on the DBsCOS. The Virtual Private Resource Pool (VPRP) leverages the Virtual Private Blockchain (VPB) capabilities of the DistributedWeb’s blockchain. The resource isolation in the network and the ability to run on isolated Container Orchestration Environments provide enterprise-grade security for the owners of applications running on the Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS). More details about Virtual Private Resource Pool (VPRP) and Virtual Private Blockchain (VPB).

Secure, Audited Out-of-the-box Application Services & Solution

Users get access to enterprise-grade, business continuity, and fairly priced computing services. They also get secure, audited out-of-the-box solutions and instant access to the latest software versions of the most used Open Source software applications that feature built-in CI/CD pipeline, and auto-patching rolling upgrades.

DistributedWeb Ecosystem

Demand

The Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS) answers the fast-growing demand for Infrastructure-as-a-service (IaaS), Container-as-a-service (CaaS), and Functions-as-a-service (FaaS) solutions by open-source software developers, container users, and application users. The FOSS developers can use the DBsCOS to create test environments and deploy production environments to deliver their own cloud application services. The Container use cases vary from owners of standard CMS-based websites to enterprise users who deliver various private and public cloud applications.

Supply

The Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS) allows open-source software developers to deliver Platform-as-a-service (PaaS), Software-as-a-service (SaaS), and Function-as-a-service (FaaS) solutions in a form of an NFT-signed software code. The DistributedWeb.io makes it possible for the infrastructure service providers to avoid underutilization, by deploying Container Orchestration Environments (COE) on a plug-and-play basis and committing CPU, RAM, storage, and network bandwidth to the DBsCOS.

USE CASES

Intellectual Property Rights Resolution For The Digital Economy

DistributedWeb.io presents an innovative, one-of-the-kind copyright protection method. It makes it possible for the open-source community to protect their intellectual property rights by signing software code with non-fungible tokens (NFT). We provide a new type of Git system that allows tracking and signing software code with NFT, called a Non-Fungible Token Signed Code Repository (NFTSCR).

Monetization System For Open Source Development

The unique combination of NFT-signed code with NFTSCR allows software developers to charge recurring fees based on their code execution. Users are charged on a Container-as-a-Service (CaaS) basis. They pay for computing resources and software applications delivered as containers in the distributed containerized environment of the Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS). The open-source developers whose code is hosted in NFTSCRs and the owners of Container Orchestration Environments (COEs) share the revenue.

Decentralized Public Cloud Infrastructure-as-a-Service (DPC IaaS)

The DistributedWeb.io's Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS) is a global, decentralized public cloud that delivers services such as Container-as-a-Service (CaaS), Function-as-a-Service (FaaS), etc.

Decentralized Private Cloud - Virtual Private Resource Pool (VPRP)

Organizations can deploy decentralized self-managed, logically, and network-wise isolated partitions of the DBsCOS on top of their own physical or virtual infrastructure. Thus organizations can host and manage workloads on their own Virtual Private Resource Pool (VPRP) that features enterprise-grade security. They have access to the DistributedWeb's "Non-Fungible Token Signed Code Repository" (NFTSCR), which allows them to use their preferred open-source software applications and NFT-signed code on top of private infrastructure.

Distributed Container-based Cloud With Kubernetes Compatible Orchestration

The Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS) is a Kubernetes-compatible decentralized public cloud. All infrastructure solutions and software applications that run on Kubernetes can be executed on the DBsCOS without any modification. The DBsCOS is compatible with Helm Charts and Kubernetes Operators.

Decentralized CI/CD pipeline

All Kubernetes-compatible CI/CD software solutions can effortlessly be converted to work on top of the DBsCOS without modification.

Decentralized Function-as-a-service (FaaS)

Function-as-a-service (FaaS) solutions developed for Kubernetes such as Knative and OpenFaaS can be used on DBsCOS without modification.

Decentralized Workflow Tracking Of Software Development Projects

The Decentralized Workflow Tracking Of Software Development Projects allows for collaboration across teams and departments to gain visibility into the progress of your work. Provides an advanced environment with an opportunity to create and optimize workflow and track software development progress in an ideal way - manage tasks, automate and monitor work processes, identify areas of improvement, and achieve better

efficiency. Cut costs of projects by providing better time management and letting you know who did what and how long it took him automate and monitor work processes, identify areas of improvement, and achieve better efficiency. Cut costs of projects by providing better time management and letting you know who did what and how long it took him.

VISION & LONG TERM EFFECTS

The ultimate goal of DistributedWeb.io's technology model is to create a fair state of the digital economy. The Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS) establishes a rational technology marketplace that strengthens the market positions of the Free and Open Source Software (FOSS) developers, protects their intellectual property, and makes it possible for them to leverage their own creativity and monetize their work.

Defines A Major Issue Experienced By The FOSS Industry

The FOSS developers power the technology industry and have extremely large user bases. The digital economy is based on FOSS solutions. The business of Alphabet (Google), Apple, Oracle, Salesforce, Meta (Facebook), eBay, Yahoo, and many other corporations is built on top of an open source code. As consumers, we use various products and services based on Linux, Apache, PHP, Python, Ruby, JavaScript, MySQL & PostgreSQL databases, and other open-source software apps.

Tech Giants and all corporations make trillions of dollars by leveraging FOSS products. Those who create the products for the digital economy - FOSS developers, do not get fairly rewarded, however. Most FOSS projects do not have stable, direct revenue streams, and the necessary financial capacity would allow them to set up a proper software development process and address any security or stability issues in a timely manner.

Users of FOSS solutions do not pay for using them in accordance with the volume of usage. The current financing model of open source projects based on donations and paid support does not establish a stable and solid business platform, they can rely on. As a result of that, many software engineers stop developing and supporting their open-source projects. Many valuable FOSS projects cease to exist. At the same time, the users of the open-source solutions expect a prompt resolution of any issue.

Outlines A Fundamental Problem Of the Digital Economy

The DistributedWeb's team understands that the fundamental principles of the FOSS-powered digital economy are different from those of the traditional economy. There is an economic equilibrium in the traditional economy. It is the point where demand and supply meet and set a fair price. There is no such equilibrium point in the price/quantity chart of the FOSS-powered digital economy, however. At least not in its current state.

The products of the traditional economy are mostly tangible items. They have a sale price which is an on-off acquisition cost. The traditional products - both tangible and intangible - are used on-premise and owned by those who purchased them.

The products of the digital economy are mostly intangible items, delivered “as-a-service”. They do not have a sale price. They are used on a subscription basis instead and do not have a one-off acquisition cost. Digital products, including software applications, are mostly used in “the Cloud” and are not owned by those who pay for them. The purchase of a digital product is a form of leasing. It does not give ownership to the buyer, it gives them limited usage rights, renewable on a pay-as-you-go principle.

In the current FOSS-powered digital economy, where all products and services are delivered on an “as-a-service” subscription basis, there is a “Usage” and “Supply”.

While the “Usage” and “Supply” of FOSS-based digital products increase by default, their acquisition cost is virtually zero or a fixed price set at the lowest possible level (donations and support do not count). There is no price curve in the FOSS-powered digital economy. There is a flat line.

This makes it impossible for the “Usage” and “Supply” to meet and establish an equilibrium point on the price/quantity chart. Despite that the “Usage” and “Supply” of FOSS-based digital products increase in quantity, the revenue of the FOSS developers is a flat line. The overall reward level of the FOSS projects is zero or close to zero. This is an abnormal situation.

The open-source software solutions have no fair usage price in the current state of the FOSS-powered digital economy. While corporations sell FOSS-based solutions on a “Software-as-a-service” basis and make trillions of dollars every year; the creators of the very same software solutions, earn virtually nothing from their products. This is in an unreasonable and unfair state!

Creates Monetization Platform For FOSS Solutions

The DistributedWeb.com's Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS) works as a function-as-a-service (FaaS) ecosystem and intellectual property monetization platform for FOSS projects.

The DBsCOS allows FOSS developers to build, compute, run, and manage application packages as functions in code repositories (NFTSCR) without having to maintain their own infrastructure. The DBsCOS protects the intellectual property rights of the FOSS project owners. DWChain, the blockchain that orchestrates the DBsCOS pays every repository (NFTSCR) owner in digital tokens every time when a container with their software application is executed.

DistributedWeb.io, through its DBsCOS, empowers the FOSS developers and communities by paying them every time when their code is executed.

DistributedWeb.io brings balance to the revenue distribution process, as a result of software technology usage. Unlike the corporations who de facto rob the FOSS community by using its products for free, dWeb empowers the open source solution providers by making it possible for them to earn revenue from their work and intellectual property.

Establishes Fair State Of The FOSS-powered Digital Economy

DistributedWeb.io establishes a fair state of the FOSS-powered digital economy. DistributedWeb makes it possible for the “Usage” and “Supply” lines of FOSS-based solutions to grow proportionally and exponentially, while the FOSS providers' revenue and the quantity of the delivered SaaS units increase. The recurring usage cost of one open source-based SaaS application stays virtually the same, while the producer's overall revenue increases with the volume of usage. We call this a “Fair State Of The Digital Economy”.

As long as there is a demand for open-source software solutions, there is an increase in the supplied quantity and an increase in the FOSS revenue. The FOSS developers' revenue can go down only if the “Usage” decreases.

DistributedWeb.io bridges the gap between usage and revenue for FOSS projects. The DistributedWeb.io's Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS) is "changing the game" by making it possible for open-source developers to receive the deserved monetary compensation based on the execution and usage of their software applications.

Decentralizing The Cloud IaaS Industry

DistributedWeb.io combines the blockchain and cloud to create a unified Web3 generation information technology ecosystem. DistributedWeb eliminates cloud lock-in and decentralizes the Cloud IaaS industry. There is no single point of failure on DistributedWeb.io's Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS). From an infrastructure point of view, the DBsCOS is one global ecosystem that delivers services like decentralized DNS, decentralized database, decentralized load balancing, decentralized code repository and application execution, and decentralized storage.

The Container Orchestration Environments (COEs'), part of the DBsCOS can be used for delivering various public cloud services. The DBsCOS features native interoperability with all the major clouds - AWS, Azure and Google Cloud, etc. The COEs' are cloud-agnostic. A COE can be hosted and run on any cloud infrastructure. This enables another very important feature of DistributedWeb.io's DBsCOS. It eases migration processes between the major clouds. The Container Orchestration Environments (COEs') can be used as intermediary layers. When hosted on AWS, Azure, Google Cloud, or any other cloud, COEs' can be migrated between infrastructures in minutes.

Secure, Decentralized Kubernetes IaaS

DistributedWeb.io allows developers, application providers and users to design, deploy and run decentralized Kubernetes clusters.

TOKENOMICS & LEGALITY

DistributedWeb.io uses a coin named DWEB. The DWEB coin is backed by intellectual property rights, digital assets, some of the world's most valued software applications, and a unique system for boosting human productivity in the digital economy.

The DWEB is a "Bet On Technology" type digital coin. "Bet On Technology" means that DWEB is backed by: The Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS) technology innovation's value; the usability and the overall operational value of all FOSS solutions hosted on the DBsCOS; the infrastructure assets contributed by the IaaS providers to the DBsCOS.

The fundamentals of DistributedWeb.io's growth are set on a vital and usable technology ecosystem that creates value for all stakeholders – open-source code developers, IT infrastructure owners, and the users of computing solutions.

There is a decentralized autonomous organization - DWeb DAO that holds the NFT rights of the DBsCOS's software code. The DWeb DAO LLC, the legal entity behind the decentralized autonomous organization holds the operational license over the intellectual property rights of the Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS).

The FOSS developers that host their code on top of the DBsCOS and the IaaS providers, who supply computing resources are stakeholders in the Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS) and in the decentralized autonomous organization.

The DAO operates with a) DWEB - native coin convertible to other cryptocurrencies: b) DBsCOS Token - internal stable token, abbreviated DCOST.

DCOST stable token is used for accounting transactions on the Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS). The stakeholders in the DBsCOS and in the DWeb DAO receive DCOST tokens based on their activity as software application providers, suppliers of infrastructure, and affiliates. The DCOST tokens are convertible to DWEB coins. The DWEB coin is traded on the cryptocurrency markets. The DCOST holders can become members of the DWeb DAO LLC, upon conversion of their DCOST tokens to DWEB coins and assigning them to the appropriate DWeb DAO LLC-related wallet.

Royalty Distribution

The Container Orchestration Environments COEs', run by dWeb Hosts, use immutable OS images. The software code that comprises the COEs' is a digital asset owned by the DWeb DAO - the decentralized autonomous organization that owns the DBsCOS. The DWeb DAO receives royalties upon execution of each COE. A certain percentage of these royalties go for research and development (R&D) activities. The rest is distributed to the investors and stakeholders of DWeb DAO.

Open Source Developers Rewards

Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS) features code deployment with tokenized tracking. There is a Non-Fungible Token Signed Code Repository (NFTSCR), a code repository, where the code is signed by a unique NFT. Tokenized tracking is a software functionality used to track changes in a set of files, similar to Git. It is fulfilled as NFTSCR and Agent inside each Container Orchestration Environment (COE). When a new NFTSCR is initialized, a unique NFT is generated and recorded in the Distributed Web's blockchain. When a contributor joins the NFTSCR, an NFT is generated for them.

DWeb Hosts (COE Owner) Rewards

COE Owners earn rewards for geolocation; network speed; the most executed code; and availability. Rewards can be earned for staking DWEB coins.

Tokenization & Code Tracking

The NFTSCR owners receive rewards in the form of DBsCOS Tokens (DCOST) according to the recorded execution. The DCOST are convertible to DWEB coins. Furthermore, pieces of code, for example, container image composer files, stored in the different NFTSCRs, altogether compose a container that has NFT as a unique identifier. It is called Container Non-Fungible Token Signed (CNFTS). Code contributors and NFT owners can create their own decentralized autonomous organizations (DAO) on top of the DistributedWeb.io's blockchain and redistribute DBsCOS tokens (convertible to DWEB coins) according to their DAO's articles of organization.

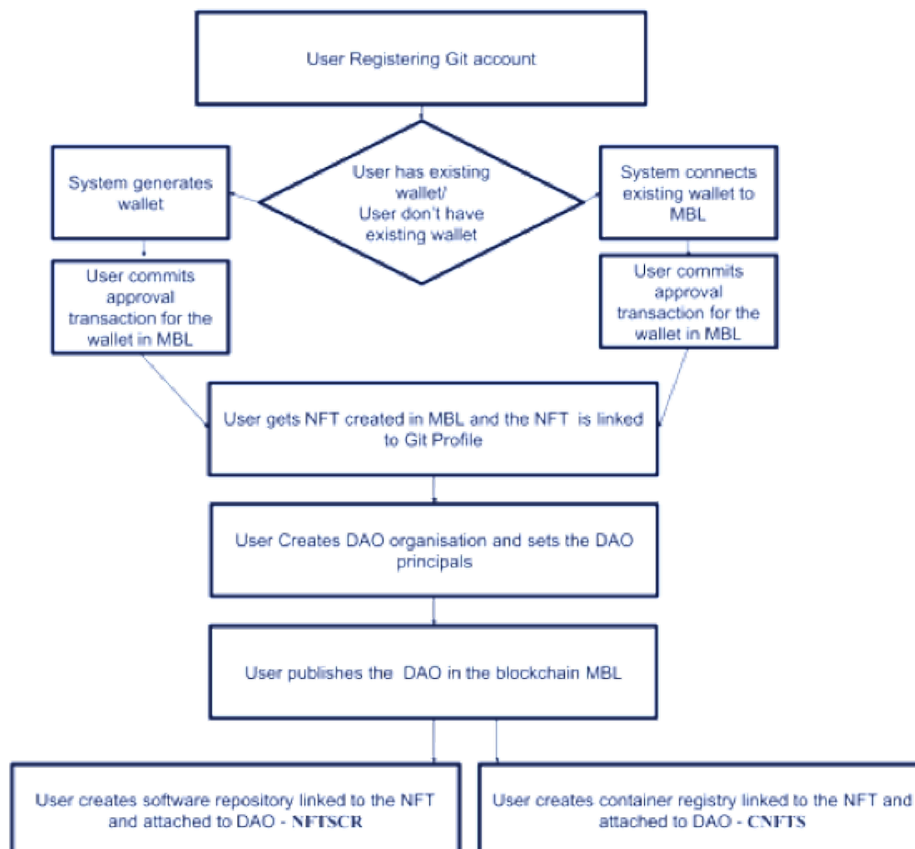
DWEB Coin & DWeb DAO

The DWEB coin allows individuals and organizations to become stakeholders in the DistributedWeb.io ecosystem. The DWEB coin is connected to the DistributedWeb's internal stable digital token DCOST, the NFT-signed code repositories (NFTSCR), and NFT-signed containers (CNFTS).

Tokenization & Code Tracking Process

Owners of DWEB coins receive dividends in DCOST from DistributedWeb.io's intellectual property revenue (DistributedWeb's NFTSCR and CNFTS execution). DCOST tokens are convertible to DWEB coins and subsequently to other cryptocurrencies and fiat currencies

- FOSS developers receive awards in DCOST based on their NFTSCR and CNFTS execution
- COE Owners receive awards in DCOST based on COE geolocation; network speed; code execution; availability.



The DWEB coin holders are stakeholders and members of a decentralized autonomous organization DWeb DAO. The DWeb DAO holds the NFTSCR rights of the Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS).

The DWeb DAO members are allowed to buy DWEB coins and receive dividends. They can also spend DWEB coins or fiat currencies to buy DCOST tokens.

DCOST stable token accounts for the transactions on the Decentralized Blockchain-scheduled Container Orchestration System (DBsCOS). The revenues from purchases of

DCOST are held in a fiat currency account, a reserve fund owned by DWeb DAO LLC. This fund works as a currency reserve of the DWeb DAO and guarantees the structural stability of the DBsCOS.

The investors and members of the DWeb DAO LLC have ownership of the DBsCOS and the DistributedWeb.io's own COEs', used as computing infrastructure capacity reserves to ensure the DBsCOS's business continuity. Upon COEs' execution, investors receive dividends in form of the DCOST tokens, paid on their digital wallets. The dividends are locked for a certain period (3 – 12 months), subject to the DWeb DAO LLC shareholders' decision. Upon its expiration, investors and DWeb DAO LLC members can convert their DCOST to DWEB coins. The DWEB coins can be: a) exchanged for fiat currencies or other digital currencies; b) spent to buy shares in the DWeb DAO LLC.

The DWeb DAO LLC is originally registered as a member-managed DAO LLC. The governance principles of the decentralized autonomous organization are set in a smart contract, however. Upon the launch and successful implementation of the DWChain and a decision of the DWeb DAO LLC members' meeting the DAO LLC will be transformed from "members managed" into an "algorithmically managed" decentralized autonomous organization.